

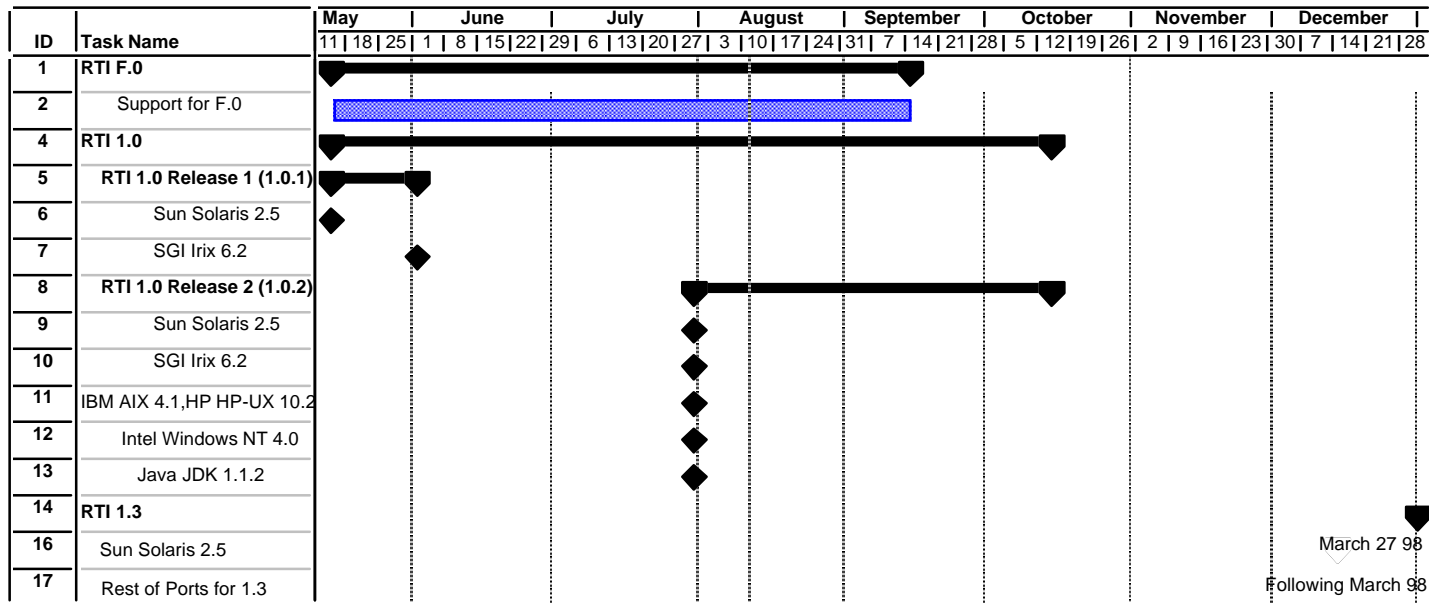


# ***RTI Update***

**RTI IPT**

**15 April 1998**

# RTI 1 Schedule Update



- Support for F.0 ended Sept 15, 1997
- RTI 1.0 Release 1 (1.0.1)
  - Sun Solaris 2.5 : May 15, 1997
  - SGI Irix 6.2 : June 2, 1997
- RTI 1.0 Release 2 (1.0.2)
  - IBM AIX 4.1, HP HP-UX 10.2, Intel Windows NT 4.0, Sun Solaris 2.5, SGI Irix 6.2 : July 31, 1997
- Java JDK 1.1.2 : October, 1997
- RTI 1.0 Release 3 (1.0.3) (Fixed NT-interoperability, Added Dec Alpha port)
  - IBM AIX 4.1, HP HP-UX 10.2, Intel Windows NT 4.0, Sun Solaris 2.5, SGI Irix 6.2 : Nov 6, 1997
- RTI 1.3 Beta released to limited users in January
- RTI 1.3 Released March 27th, Built to interface Spec 1.3-all services, Solaris 2.51
- RTI 2.0 To be released in December, Built to interface Spec 1.3

## Porting of RTI 1.3

- **AMG 23 included a call for inputs on Platforms, OSs, and Compilers being used for HLA federates:**
  - **Recommend to continue to support :**
    - **Sun, Solaris 2.51, Work Shop 4.1 C++ compiler**
    - **SGI, IRIX 6.2, Mips Pro 7.1 C++ compiler**
    - **Intel, NT 4.0, Visual C++ 5.0 compiler**
  - **Only Single Request for continuing the following:**
    - **NSS: HP (Tac 4), HP/UX 10.2, HP C++ Compiler 10.32**
    - **CCTT: Motorola (MPX 5000), IBM AIX 4.2.1, Power Ada 2.2.3**
  - **Several New request for the following:**
    - **SGI, IRIX 6.3 and 6.4 (6.5 when released)**
    - **NT 4.0 with Borland C++ compiler**
    - **Intel, LINUX 5.0, GNU g++ compiler**
    - **VME Power PC cards, VxWorks 5.3.1, Cross Green Hills C++ 1.8.8.d**
    - **Power PC, Lynx 2.5, APEX cross compiler**
    - **SGI, IRIX 6.4 with APEX compiler**

## **RTI 1.3 Bindings (Built to the 1.3 Interface Spec)**

- **CORBA Cap**
  - Server side CORBA CAP for Solaris C++ implementation
  - Free ORB, TAO (The ACE ORB) no run time cost
  - IDL and server executable Delivered
- **Java Cap**
  - Java binding to Solaris C++ implementation
  - JNI (Java Native Interface) 1.1 Spec (possibly 1.2 if released soon)
- **Ada Cap**
  - Ada 95
  - French MOD is developing binding to Solaris C++ implementation

# Release Schedule

- **Key Platform and API Ports**
  - **Sun Solaris 2.51 (Rel 1): March 27th, 98**
  - **CORBA Cap, Sun: May 22th, 98**
  - **Ada Cap : May 29th, 98 (tentative)**
  - **Java Cap, Sun: June 15th, 98**
  - **Sun Solaris 2.51 (Rel 2): June 15th, 98**
  - **SGI IRIX 6.2: June 15th, 98**
  - **NT 4.0: July 31, 98**

# Benchmark Programs

- **Goals of the Benchmark Programs**
  - Performance indicators for each of the major categories of inter-federate exchange through the RTI.
  - Simple and unambiguous tools that can be applied by general users of the RTI.
  - Easy to understand metrics that facilitate comparison and investigation of factors influencing federation performance.
  - Source code that can be easily distributed and compiled on all RTI supported platforms.
  - Benchmark programs that are parameterizable using simple command-line arguments and FED file modifications.

# Benchmark Programs

- **Update Latency Benchmark**
  - measures the round trip time(update latency) for an Update Attribute Values(UAV) service call
- **Update Throughput Benchmark**
  - measures the number of update attribute values per second that are possible for the given system configuration
- **Time Synchronization Benchmark**
  - measures the number of RTI time step cycles that can be processed by the RTI per second
- **Ownership Management Benchmark**
  - measures the number of round trip ownership transfers per second per federation execution

## **Status of Benchmarks**

- **Performance Benchmarks developed Using 1.0**
- **Updating to 1.3 API**
- **Developing Standard Scripts for Running Benchmarks**
- **Plan to Release With Solaris (Rel 2), June 15th**
- **Propose Technical Exchange at Next AMG**